GLACIAL STRIAE TRENDS IN NEW BRUNSWICK:

A COMPILATION

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GLACIAL STRIAE TRENDS IN NEW BRUNSWICK: A COMPILATION

INTRODUCTION

Observation of glacial striae and recording of their orientations was a common activity during the early years of geological investigation in New Brunswick. The first list of such observations was published by Professor James Robb in 1851. A similar list was published by H.Y. Hind in 1865. Subsequently, G.F. Matthew (Mathew [sic], 1879) and R. Chalmers (1884-1902) published lists of their own striae measurements, plus those of other pioneer New Brunswick geologists such as L.W. Bailey and R.W. Ells. Chalmers plotted some of these striae on his surficial geology maps. Most subsequent striae observations have been recorded only on maps.

The purpose of this current compilation is to list all available striae data collected during the past century and a half, so as to assist in the interpretation of the glacial flow patterns that have sculpted the surface of New Brunswick. This report comprises two primary parts: 1) a listing of all currently known sources of striae data for New Brunswick, and 2) a compilation of the actual raw data. Synthesis, interpretation and discussion of this data are presented in another report (Geoscience Report 89-2).

COMPILATION

Data Sources

Glacial striae orientations were obtained from a number of sources, primarily published by the New Brunswick Department of Natural Resources and Energy (and its predecessors: Department of Forests, Mines and Energy; Department of Natural Resources; Department of Lands and Mines) and by the Geological Survey of Canada. These included Quaternary or surficial geology maps and reports; granular aggregate inventory maps; Geological Survey of Canada annual reports; and bedrock geology maps at scales of 1 inch equals 1/2 mile, 1 inch equals 1 mile, 1 inch equals 2 miles, and 1:50 000. Some additional information was obtained from bedrock geology reports, externally published papers, university theses, and larger scale bedrock geology maps (the latter rarely contain glacial striae data). All of these sources of information are listed in the accompanying reference list.

Also included in this compilation are data collected by the compiler during the 1988 field season, and similar, as yet unpublished, data made available by P. Bobrowsky, A.G. Pronk, and M. Foisy and G. Prichonnet.

Method of Compilation

The striae data were compiled on the basis of the National Topographic System (NTS) 1:50 000 scale map sheets for New Brunswick (Figure 1). For each map sheet, the striae orientations from each individual source are listed. In those cases where source authors give the measurements of the striae orientations in degrees, these measurements are recorded, even if the ice-flow direction is now known or suspected to be in the opposite sense. In those cases where the striae are presented simply as symbols on a map or figure, the orientation of the symbol was measured as accurately as possible. Striae of indefinite orientation were assigned the trend that seemed most likely in comparison to other available data from the area. However, this assignment of a trend to the latter type of data is simply a matter of convenience, and should not be taken to infer that this is the true trend of the striae: the reverse trend may be equally probable.

All of the compiled striae orientations are tabulated in the accompanying Appendix, by NTS map sheet. The NTS map sheets are listed in alpha-numeric order (i.e., 11 L/4, 21 B/10, 21 B/15, 21 G/1, ...). Orientations are recorded as azimuth measurements, i.e., northward ice flow is at 000°; eastward at 090°; southward at 180°; and westward at 270°. Those striae identified by their source author as having

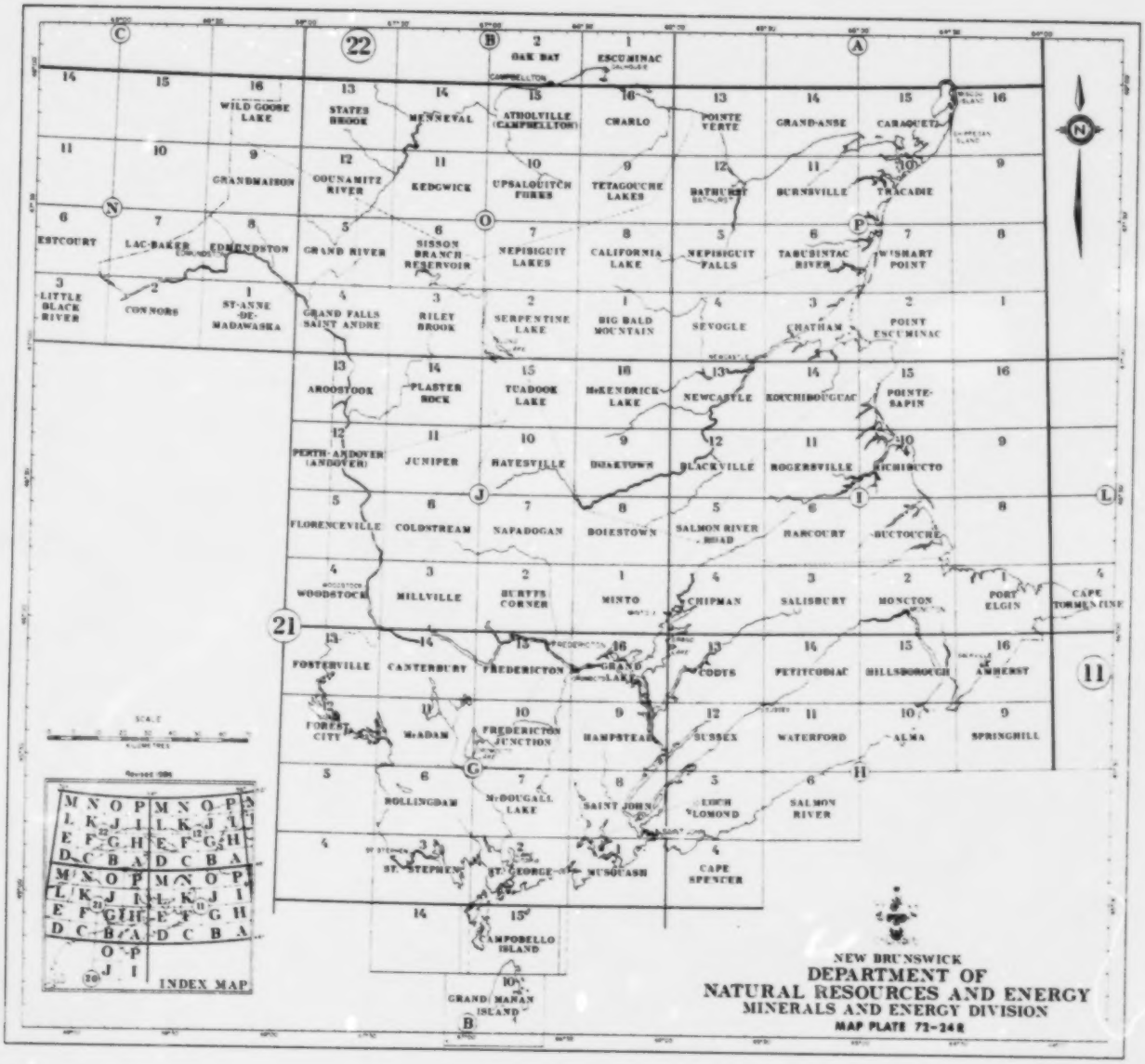

Figure 1. The 1:50 000 scale NTS map areas in New Brunswick

definite orientations are highlighted by being underscored, except in the case of some bedrock maps on which all of the striae are mapped as definite (typically, these orientations are inferred or assumed rather than definite). In this latter case, the directions are noted as being "mapped as definite." In a few instances, the assigned definite orientations are questionable, and are noted as such.

ACKNOWLEDGEMENTS

A.G. Pronk (New Brunswick Department of Natural Resources and Energy) kindly provided his unpublished data for NTS areas 21 O/3, 21 O/16 and 21 P/13, while P. Bobrowsky (Geological Survey of Canada) provided permission to use his unpublished data for NTS areas 21 O/16 and 21 P/13. Similarly, M. Foisy and G. Prichonnet (Université du Québec à Montréal) provided a detailed listing of all of their data for NTS areas 21 H/10, 21 H/11 and 21 H/15 that was published in summarized form in their preliminary report (Foisy and Prichonnet 1988). This provision of unpublished data is gratefully acknowledged. In addition, P. Chiswell (New Brunswick Department of Natural Resources and Energy) is thanked for bringing to my attention striae sites in NTS area 21 G/6. The manuscript was typed by S. Munn.

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_____ 1982a. Granular aggregate resources of St. Stephen, 21 G/3. New Brunswick Department of Natural Resources, Mineral Development Branch, Plate 82-162.

_____ 1982b. Granular aggregate resources of Rollingdam, 21 G/6. New Brunswick Department of Natural Resources, Mineral Development Branch, Plate 82-163.

_____ 1983. Granular aggregate resources of McDougall Lake, 21 G/7. New Brunswick Department of Natural Resources, Mineral Development Branch, Plate 83-30.

_____ 1984a. Surficial deposits of parts of the Fredericton Junction (21 G/10) and McDougall Lake (21 G/7) map-areas. New Brunswick Department of Natural Resources, Mineral Resources Division, Plate 84-33.

_____ 1984b. Preliminary surficial geology map of the Sisson Branch Reservoir map-area, 21 O/6. New Brunswick Department of Natural Resources, Mineral Development Branch, Plate 84-480.

_____ 1985a. Granular aggregate resources of Grand Lake, 21 G/16. New Brunswick Department of Natural Resources, Mineral Resources Division, Plate 85-30.

_____ 1985b. Granular aggregate resources of Codys, 21 H/13. New Brunswick Department of Natural Resources, Mineral Resources Division, Plate 85-31.

_____ 1985c. Granular aggregate resources of Chipman, 21 I/4. New Brunswick Department of Natural Resources, Mineral Resources Division, Plate 85-33.

_____ 1985d. Granular aggregate resources of Buctouche, 21 I/7. New Brunswick Department of Natural Resources, Mineral Resources Division, Plate 85-36.

_____ 1985e. Granular aggregate resources of Chatham, 21 P/3. New Brunswick Department of Natural Resources, Mineral Resources Division, Plate 85-44.

_____ 1986. Granular aggregate resources of Connors (21 N/2), Little Black River (21 N/3), Estcourt (21 N/6), and Lac-Baker (21 N/7). New Brunswick Department of Natural Resources and Energy, Mineral Resources Division, Plate 86-228.

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_____ 1959b. McDougall Lake (west half), Charlotte County, New Brunswick. New Brunswick Department of Lands and Mines, Mines Branch, Plate 59-8A.

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APPENDIX 1.

Glacial Striae Trends

Cape Tormentine
11 L/4

Chalmers (1895)

183, 184, 185, 186, 190, 191, 193, 198, 304, 316, 318, 318, 322, 323, 323, 324, 328, 328, 328, 328, 328, 329, 330, 336, 342, 344, 345, 345, 348, 348, 348, 358, 358

Ells (in Chalmers 1885)

178

Rampton & Paradis (1981b) - orientations measured from map

071, 189, 202, 222, 227, 290, 323

Seaman (1986a)

174, 189, 213, 309, 324, 327, 332

Grand Manan Island
21 B/10

Alcock (1948b) - orientations measured from map
- all mapped as definite

068, 070, 070, 075, 087, 119, 123, 126, 129, 133, 141, 161, 180, 180, 184, 190

Chalmers (1890)

090, 090

Legget (1980)

090, 097, 120, 150, 163, 180

Seaman (1987d)

166

Campobello Island
21 B/15

Alcock (1948a) - orientations measured from map
- all mapped as definite

106, 111, 111, 114, 116, 119, 122, 124, 125, 127, 131, 131, 132, 132, 133, 135, 141, 145, 145, 146, 146, 148, 160, 160, 163, 169, 169, 171, 176

Chalmers (1890)

105-110, 110-160, 115-120, 115-130, 115-125, 130, 150, 150-160, 165-170-180

Seaman (1987c)

100, 110, 114, 116, 120, 120, 121, 124, 128, 128, 131, 132, 133, 135, 136, 141, 145, 151, 160

Musquash
21 G/1

Alcock (1959) - orientations measured from map
- all mapped as definite

131, 150, 171

Bailey (in Mathew 1879)

140, 160

Bélanger (1978) - orientations measured from map

121, 127, 127, 129, 132, 132, 133, 138, 147, 148, 151, 152, 153, 155, 156, 177, 180, 190

Chalmers (1885, 1890)

080, 115, 115, 120, 120, 150, 160, 160, 160, 160, 170, 170, 180, 180, 190, 190, 205

Chalmers (1893)

115, 120, 124, 150, 160, 170, 178, 182

Gadd (1973)

130, 145, 145, 155, 165, 170, 175, 180

Musquash (21 G/1), con't...

Mathew (1879)

100, 130, 130, 140, 140, 140, 145, 150, 160, 160, 170, 175

Robb, J. (in Chalmers 1885)

142, 180

Seaman (1988 field notes)

160, 165, 175, 175, 176, 187, 198, 214

Terrain Analysis & Mapping Services Ltd. (1983)
- orientations measured from map

169, 170, 172

St. George
21 G/2

Alcock & Perry (1960) - orientations measured from map
- all mapped as definite

081, 102, 104, 105, 106, 115, 115, 116, 116, 116, 116, 117, 118, 130, 130, 131, 132, 132, 135, 140, 145, 155, 158, 159, 160, 186

Bailey (in Mathew 1879)

100, 110, 115, 115, 120, 125, 125, 130, 135, 150, 150, 160

Chalmers (1885, 1890)

091, 091, 100, 102, 110, 110, 110, 110, 116, 120, 126, 126, 130, 130, 130, 140, 160, 160, 170, 180, 185, 185, 190, 195

Finamore & Seaman (1987)

098, 117, 123, 125, 125, 125, 126, 130, 138, 144, 145, 145, 146, 146, 149, 152, 154, 156, 156, 158, 164, 164, 166, 170, 175, 177, 179, 182, 186, 188, 191, 199

Gadd (1973)

080, 100, 100, 105, 115, 120, 125, 130, 135, 145, 145, 160, 160, 165, 165, 170, 170, 175, 180, 180, 180, 190, 190

St. George (21 G/2), con't...

Mathew (1879)

100, 100, 100, 100, 105, 105, 120, 120, 120, 120, 120, 120, 120, 140, 145, 150, 150, 155, 155, 165, 170, 175, 190

Robb, J. (in Chalmers 1885)

115, 117, 117

Seaman (1988 field notes)

075, 105, 110, 131

Terrain Analysis & Mapping Services Ltd. (1983)
- orientations measured from map

070, 083, 149, 160, 168, 172, 177, 194

St. Stephen
21 G/3

Alcock & MacKenzie (1960a) - orientations measured from map
- all mapped as definite

115, 134, 137, 142, 142, 150, 158, 158, 162

Bailey (in Mathew 1879)

130, 140, 170

Chalmers (1890)

120, 130, 140, 140-145, 140-150, 145, 145-150

Mathew (1879)

070, 130, 130, 135, 135, 140, 140, 140, 155, 155, 160, 160, 160, 170, 170, 170, 175, 175

Robb, J. (in Chalmers 1885)

132, 152, 152

Thibault (1982a)

130, 130, 130, 130, 130, 135, 140, 140, 140, 140, 140, 145, 150, 150, 155, 190

Rollingdam
21 G/6

Alcock & MacKenzie (1960b) - orientations measured from map
- all mapped as definite

127, 128, 139, 139, 140, 141

Chalmers (1884, 1890)

120-125, 130, 130, 140, 150

Gadd (1973)

140, 140

Mathew (1879)

070, 120, 150, 150

Robb, J. (in Chalmers 1885)

162

Seaman (1988 field notes)

104, 110, 117, 131, 141, 151, 172, 226

Rollingdam (21 G/6), con't...

Thibault (1982b)

090, 105, 125, 125, 135, 135, 137, 137, 140, 140, 140, 140, 140, 145, 145, 145, 145, 148, 148, 150, 150, 150, 150, 155, 205

McDougall Lake
21 G/7

Chalmers (1890)

130, 145, 160, 180

Gadd (1973)

130, 180

Mathew (1879)

120, 170, 180

Seaman (1988 field notes)

160, 170, 175, 185, 190

Szabo (1975)

143, 181, 181, 182

Terrain Analysis & Mapping Services Ltd (1983)
- orientations measured from map

064, 102, 120, 123, 142, 147, 152, 165, 165, 166, 166, 168, 170, 170, 172, 173, 175 ,175, 181, 191, 191, 209

McDougall Lake (21 G/7), con't...

Thibault (1983)

110, 115, 115, 115, 140, 140, 140, 145, 150, 150, 155, 160,
160, 163, 165, 170, 170, 175, 175, 175, 175, 175, 180, 180,
180, 180, 180, 180, 180, 180, 180, 180, 185, 185, 185, 185,
185, 185, 190, 190, 190, 195, 195

Thibault (1984a)

110, 115, 115, 115, 140, 150, 155, 160, 175 175, 180, 180,
180, 180, 190

Tupper (1959a,b) - all mapped as definite

160, 172, 176, 176, 180

Saint John
21 G/8

Bailey (in Mathew 1879)

140, 140, 140, 150, 160, 165, 204

Bélanger (1978) - orientations measured from map

078, 118, 130, 147, 147, 151, 152, 155, 159, 161, 164, 173, 177, 191, 197, 201, 219, 231

Chalmers (1885, 1890)

140, 150, 160, 160, 165, 170, 170, 175, 178, 180, 180, 180, 180, 180, 185, 195, 195, 215, 230

Ells (in Chalmers 1885)

105

Finamore et al. (1976)

155, 170, 275

Gadd (1973)

155, 170, 170, 275

Saint John (21 G/8), con't...

MacKenzie (1964a) - orientations measured from map
- all mapped as definite

104, 110, 146, 148, 155, 166, 168, 175, 184, 185

Mathew (1879)

090, 105, 115, 130, 160, 160, 160, 160, 165, 170, 170, 175, 175, 175, 176, 176, 180, 182, 182, 200, 200, 205, 210, 210, 215, 225, 240, 270, 300

Melvin (1966) - orientations measured from map

144, 175

Robb, J. (in Chalmers 1885)

115, 130, 150, 160, 161, 185, 190

Terrain Analysis & Mapping Services Ltd. (1983)
- orientations measured from map

134, 144, 144, 151, 155, 155, 157, 160, 162, 167, 174, 174, 175, 182

Hampstead
21 G/9

Chalmers (1890, 1902)

135, 135, 139, 140, 140, 145, 145, 146, 147, 147, 150, 150, 151, 152, 152, 152, 154, 154, 155, 155, 155, 157, 157, 160, 160, 160, 162, 163, 165, 170, 170, 172, 178, 215, 240, 240-245

Gadd (1973)

130, 130, 140, 145, 145, 145, 160, 165

MacKenzie (1964b) - orientations measured from map
- all mapped as definite

136, 145, 147, 159, 164, 165

Mathew (1879)

120, 135, 135, 145, 145, 155, 160

Robb, J. (in Chalmers 1885)

152, 152

Seaman (1987e)

085, 137, 146, 148, 152, 153, 153, 156, 161, 190

Fredericton Junction
21 G/10

Chalmers (1884, 1890, 1902)

120, 155, 155, 155, 160, 160, 170, 170, 170, 180, 180, 186

Clark (1962a,b) - orientations measured from maps

148, 156, 163, 170, 173, 179, 180, 180, 180, 182, 182, 184, 186

Gadd (1973)

150, 155, 165, 170, 170

Hind (in Chalmers 1885)

160

Mathew (1879)

150, 160, 160, 175

Robb, J. (in Chalmers 1885)

160

Fredericton Junction (21 G/10), con't...

Seaman (1988 field notes)

103, 104, 105, 107, 107, 114, 114, 116, 117, 124, 124, 125,
127, 129, 133, 138, 144, 146, 147, 147, 147, 149, 155, 158,
159, 160, 161, 163, 163, 164, 164, 166, 166, 166, 172, 175,
175, 176, 176, 177, 178, 178, 180, 183, 183, 183, 185, 186,
187, 192, 201, 207, 210

Thibault (1981)

095, 100, 105, 105, 105, 155, 155, 155, 160, 160, 160, 165,
165, 165, 165, 165, 165, 165, 165, 165, 170, 170, 170, 170,
170, 175, 175, 175, 175, 175, 175, 180, 180, 180, 180, 180,
180, 180, 180, 180, 180, 185, 185, 185, 185

Thibault (1984a)

097, 100, 105, 105, 105, 105, 105, 105, 115, 125, 150, 155,
160, 160, 160, 165, 165, 170, 170, 170, 175, 175, 175, 175,
175, 180, 180, 180, 180, 180, 180, 180, 180, 180, 180, 180,
185, 185, 185, 185, 185

McAdam
21 G/11

Chalmers (1884, 1902)

075, 125, 135, 150, 153, 155, 155, 160, 165

Clark (1961a,b) - orientations measured from maps
- both mapped as definite

142, 149

Gadd (1973)

145, 150, 150

Mathew (1879)

120, 130, 135, 135, 135, 140, 160, 160, 170

Robb, C. (in Chalmers 1885)

130, 150

Robb, J. (in Chalmers 1885)

132, 162

McAdam (21 G/11), con't...

Seaman (1982a)

096, 099, 099, 102, 102, 102, 102, 103, 103, 104, 104, 107,
107, 108, 110, 110, 113, 115, 116, 124, 125, 128, 128, 130,
132, 132, 132, 133, 133, 134, 134, 135, 136, 137, 139, 141,
141, 143, 145, 148, 149, 151, 153, 154, 156, 157, 157, 159,
163, 167, 167, 170, 174, 176, 180

Seaman (1988 field notes)

064, 070, 079, 091, 098, 099, 100, 102, 102, 102, 103, 103,
104, 106, 110, 111 ,114, 118, 125, 126, 127, 130, 130, 131,
133, 133, 134, 135, 142, 146, 146, 151, 153, 164, 167, 168,
183, 183, 183

Forest City
21 G/12

Chalmers (1902)

150

Gadd (1973) - orientation measured from map

139

Seaman (1982b)

125, 133, 134, 134, 139, 140, 140, 141, 141, 142, 145

Smith (1965) - orientation measured from map
- mapped as definite

144

Fosterville
21 G/13

Anderson & Poole (1959) - orientations measured from map
- all mapped as definite

139, 142, 162

Chalmers (1884, 1902)

125, 132, 135, 140, 140, 140, 145, 150, 150, 155, 160, 160

Tupper (1957) - orientations measured from map
- all mapped as definite

140, 140, 142, 164

Canterbury
21 G/14

Anderson & Poole (1959) - orientations measured from map
- all mapped as definite

156, 157, 158, 163, 164, 166, 170, 172, 175, 177

Chalmers (1884, 1902)

140, 140, 140, 142, 145, 145, 145, 150, 150, 150, 150, 155, 160, 160, 160, 160, 170, 170, 175, 180

Gadd (1973)

110, 115, 135, 135, 140, 155, 160, 160, 170, 170

Hind (in Chalmers 1885)

160

Lee (1962) - orientations measured from map

129, 133, 144, 154, 155, 159, 161, 162, 168

Patterson (1957, 1958) - orientations measured from maps
- all mapped as definite

142, 149, 153, 156, 157, 157, 158, 159, 160, 160, 161, 161, 162, 162, 162, 162, 163, 164, 164, 164, 165, 166, 166, 169, 181

Canterbury (21 G/14), con't...

Robb, C. (in Chalmers 1885)

150, 150

Robb, J. (in Chalmers 1885)

152

Fredericton
21 G/15

Anderson & Poole (1959) - orientations measured from map
- all mapped as definite

116, 141, 142, 147, 148, 148, 152, 155

Chalmers (1884, 1902)

040, 060, 103, 110, 120, 120, 120, 120, 126, 130, 132,
133, 135, 135, 135, 135, 135, 136, 136, 140, 140, 140, 142,
142, 145, 145, 145, 145, 145, 150, 150, 150, 150, 150, 150,
150, 150, 150, 152, 152, 152, 152, 155, 155, 155, 155, 160,
160, 160, 160, 170, 170, 170, 170, 172, 175, 180, 185

Gadd (1973)

165

Hind (in Chalmers 1885)

150, 150, 150, 150

Lee (1957) - orientations measured from map

097, 113, 113, 115, 124, 130, 131, 133, 133, 138, 138, 140,
140, 143, 143, 145, 146, 146, 147, 147, 147, 147, 148, 148,
148, 149, 149, 149, 149, 150, 150, 150, 150, 150, 150, 151,
151, 151, 151, 152, 152, 152, 152, 153, 153, 153, 153, 153,
154, 154, 154, 154, 154, 154, 156, 156, 156, 157, 158, 158,
158, 159, 160, 163, 179, 179, 183, 185, 202

Fredericton (21 G/15), con't...

Robb, C. (in Chalmers 1885)

140, 150, 180

Robb, J. (in Chalmers 1885)

117, 132, 150, 150, 150, 150, 150, 150, 150, 152, 152

Seaman & Thibault (1981)

115, 123, 125, 125, 135, 140, 145, 147, 147, 147, 150, 150, 150, 150, 150, 150, 155, 160, 160, 160, 175

Grand Lake
21 G/16

Chalmers (1890, 1902)

148, 156, 165, 170, 175, 180

Gadd (1973)

135, 145, 160, 175, 185, 185, 190, 210

Hamilton (1961b) - orientation measured from map

161

Robb, J. (in Chalmers 1885)

140, 148

Thibault (1985a)

178, 180, 180, 190, 195, 195, 200

Cape Spencer
21 H/4

Bélanger (1978) - orientations measured from map

195, 200, 200

Chalmers (1890)

230-235

Mathew (1879)

130, 145, 180, 195, 195, 220

Pronk (1985)

140, 150, 160 ,170, 180, 185

Seaman (1987f)

195, 204, 215

Loch Lomond
21 H/5

Alcock (1938) - orientations measured from map
- all mapped as definite

158, 165, 178, 182, 184, 191, 194

Bailey (in Mathew 1879)

130, 140, 155, 160, 160, 170, 170, 170, 180

Bélanger (1978) - orientations measured from map

130, 139, 146, 148, 148, 150, 151, 156, 158, 160, 161, 163, 164, 166, 167, 168, 174, 177, 181, 193, 193, 204, 211, 216

Chalmers (1890)

140, 140, 160, 160, 180, 195-200, 210

Mathew (1879)

140, 150, 155, 160, 160, 165, 175, 182, 200, 215

Melvin (1966) - orientations measured from map

159, 174, 175, 200, 208

Loch Lomond (21 H/5), con't...

Pronk (1985)

125, 130, 135, 145, 145, 150, 160, 190

Rampton & Paradis (1981c) - orientations measured from map

166, 172, 173, 173, 177

Salmon River
21 H/6

Chalmers (1890)

140, 155-160, 160

Rampton & Paradis (1981c) - orientations measured from map

121, 167

Seaman (1987a)

152, 152, 157, 158, 159, 161, 161, 161, 162, 164, 171

Seaman (1988 field notes)

159, 165

Alma
21 H/10

Chalmers (1890, 1895)

078, 080, 085, 085, 090, 098, 103, 118, 128, 134, 143, 148, 145-150, 150, 150, 150, 158, 172, 173, 174, 178, 180, 183, 183, 188, 190, 196, 196, 198, 203, 203, 203, 205, 208, 208, 208, 208, 208, 211, 213, 218, 218, 218, 218, 220, 221, 223, 223, 223, 223, 226

Ells (in Chalmers 1885)

080, 080, 178, 235

Foisy and Prichonnet (unpublished data, summarized in Foisy and Prichonnet 1988)

114, 115, 117, 118, 118, 118, 120, 120, 120, 120, 120, 125, 129, 130, 130, 130, 131, 132, 132, 134, 134, 135, 136, 136, 138, 138, 138, 140, 140, 140, 140, 141, 142, 142, 142, 142, 143, 143, 144, 145, 145, 145, 146, 148, 148, 150, 152, 152, 152, 152, 152, 152, 155, 155, 156, 158, 158, 158, 158, 159, 160, 160, 160, 160, 160, 160, 162, 162, 162, 165, 166, 168, 168, 168, 170, 171, 171, 172, 183, 190, 196, 198, 199, 200, 201, 201, 205, 208, 209, 210, 210, 210, 213, 214, 214, 215, 220, 220, 220, 222, 222, 223, 224, 225, 226, 227, 228, 228, 229, 230, 230, 230, 230, 231, 234, 234, 236, 237, 238, 238, 240, 240, 240, 240, 246, 248

Alma (21 H/10), con't...

Kindle (1962) - orientation measured from map
- mapped as definite

149

Rampton & Paradis (1981c) - orientations measured from map

121, 130, 137, 151, 197, 199, 224, 255

Thibault (1976)

140, 150

Waterford
21 H/11

Bailey (in Mathew 1879)

115

Chalmers (1890)

120, 165, 178

Ells (in Chalmers 1885)

070

Evans & Alcock (1945) - orientations measured from map
- all mapped as definite

140, 150, 154

Foisy and Prichonnet (unpublished data, summarized in Foisy and Prichonnet 1988)

056, 128, 130, 140, 140, 160, 160, 162, 162, 162, 162, 162, 163, 164, 164, 164, 165, 166, 166, 166, 168, 168, 170, 172, 174, 176, 178, 180, 180, 197

Kindle (1962) - orientations measured from map
- all mapped as definite

175, 178, 191

Waterford (21 H/11), con't...

Rampton & Paradis (1981c) - orientations measured from map

067, 133, 147, 162, 163

Seaman (1987b)

143, 144, 145, 145, 147, 148, 151, 153, 154, 154, 155, 155, 156, 157, 157, 158, 159, 159, 159, 160, 163, 163, 165, 166, 167, 167, 168, 168, 168, 168, 168, 169, 170, 170, 170, 172, 172, 173, 173, 174, 174, 176, 176

Seaman (1988 field notes)

065, 123, 139, 142, 145, 152, 154, 156, 157, 158, 159, 159, 160, 161, 163, 163, 164, 164, 165, 166, 166, 168, 170, 170, 172, 172, 172, 178, 178

Sussex
21 H/12

Alcock & MacKenzie (1946) - orientations measured from map
- all mapped as definite

159, 160, 160, 172, 180, 181, 182

Brinsmead (1976)

170, 170, 170, 175, 175, 175, 180, 180, 186, 190

Chalmers (1890)

130, 150, 160, 160, 160, 160, 160, 160, 160, 160, 160, 160, 160, 165, 165, 165, 170, 170, 170-175, 170-175, 175, 175, 175, 175, 175-180, 180, 180, 180-185, 185, 190

Ells (in Chalmers 1885)

170, 170

Ells (in Mathew 1879)

165

Rampton & Paradis (1981c) - orientations measured from map

072, 160, 163, 176, 192

Codys
21 H/13

Chalmers (1890)

140-145, 155, 160, 160, 160, 160, 160, 160, 160, 160-165, 160-170, 160-175, 165, 165, 165, 170-175, 175

Hamilton (1961a,b) - orientations measured from maps

153, 159, 159, 160, 160, 161, 162, 164, 164, 164, 164, 165, 165

Rampton & Paradis (1981c) - orientations measured from map

130, 133, 145, 145, 147, 148, 152, 156, 157, 160, 160, 164, 168, 168, 174, 175, 176, 176, 179, 200

Seaman (1988 field notes)

062, 110, 132, 150, 183, 185, 193

Thibault (1985b)

146, 150, 152, 154, 156, 156, 156, 159, 160, 160, 160, 160, 160, 160, 162, 165, 165, 165, 165, 165, 165, 167, 168, 170, 170, 173, 175, 180, 180, 180, 182, 190, 190, 190, 200, 200, 210

Petitcodiac
21 H/14

Chalmers (1890)

045, 050, 085, 135, 150, 160, 165, 170, 185, 340

Ells (in Chalmers 1885)

155, 210

Ells (in Mathew 1879)

170, 180

Rampton & Paradis (1981c) - orientations measured from map

147, 162

Seaman (1988 field notes)

155, 161, 161, 163, 163

Hillsborough
21 H/15

Chalmers (1885, 1890, 1895)

030, 050, 050-055, 082, 088, 090, 094, 098, 100, 123, 128, 136, 142, 148, 156, 158, 158, 158, 158, 160, 160, 161, 161, 163, 167, 168, 168, 168, 168, 168, 168, 168, 168, 168, 171, 172, 172, 173, 173, 173, 173, 174, 176, 176, 178, 178, 178, 178, 178, 178, 178, 180, 181, 181, 183, 184, 188, 188, 188, 188, 191, 198, 198, 198, 203, 203, 203, 208, 208, 208, 210, 218, 218, 300, 300, 305

Ells (in Chalmers 1885)

120, 126, 158, 168, 180, 235, 245, 245

Ells (in Mathew 1879)

120, 170, 180, 195, 205, 220

Foisy and Prichonnet (unpublished data, summarized in Foisy and Prichonnet 1988)

000, 000, 000, 017, 020, 021, 026, 030, 030, 032, 032, 035, 036, 042, 044, 044, 045, 058, 058, 058, 060, 060, 060, 065, 078, 080, 080, 080, 080, 080, 084, 084, 086, 086, 087, 090, 090, 100, 104, 104, 113, 114, 114, 117, 117, 117, 118, 119, 120, 120, 120, 120, 120, 120, 121, 123, 124, 125, 126, 126, 128, 133, 135, 142, 142, 142, 144, 144, 145, 145, 148, 150, 150, 152, 153, 153, 155, 155, 156, 156, 160, 162, 163, 165, 166, 168, 172, 174, 174, 175, 176, 176, 176, 177, 178, 180, 180, 180, 180, 180, 182, 182, 183, 185, 186, 190, 190, 192, 194, 195, 196, 196, 198, 200, 200, 200, 200, 200, 200, 204, 205, 207, 208, 208, 216, 225, 230, 352

Hillsborough (21 H/15), con't...

Norman (1941b) - orientations measured from map
- all mapped as definite

148, 187, 198

Rampton & Paradis (1981c) - orientations measured from map

057, 121, 144, 157, 160, 161, 166, 168, 172, 174, 178, 210

Seaman & Lohse (1986a)

061, 130, 138, 143, 154, 162, 163, 167, 171, 180, 187, 198, 220

Amherst
21 H/16

Chalmers (1885, 1895)

166, 168, 171, 172, 175, 178, 178, 178, 178, 178, 181, 183,
185, 188, 188, 188, 188, 188, 190, 192, 194, 198, 198, 200,
200, 208, 208, 213, 213, 214, 218, 218, 222, 223, 228

Ells (in Chalmers 1885)

168, 168, 168, 168, 174, 183, 193

Rampton & Paradis (1981c) - orientations measured from map

159, 167, 176, 222

Seaman (1986b)

159, 171, 202

Port Elgin
21 I/1

Chalmers (1895)

068, 068, 078, 078, 088, 090, 126, 168, 170, 172, 176, 176, 178, 180, 183, 188, 190, 191, 193, 193, 193, 193, 195, 198, 198, 200, 201, 203, 208, 208, 212, 218, 218, 220, 223, 318, 333, 338, 344, 348, 353, 358

Prest (1972)

070, 090, 175, 220

Seaman & Lohse (1986b)

167, 175, 177, 192, 195, 198, 212, 214, 216, 218, 220, 337

Moncton
21 I/2

Chalmers (1895)

048, 049, 055, 079, 162

Ells (in Chalmers 1885)

154

Hobson & Carr (1967) - orientations measured from map

120, 124

Norman (1941a) - orientations measured from map
- all mapped as definite

117, 129, 129, 162

Rampton & Paradis (1981b) - orientations measured from map

<u>033</u>, 055, 158, 161

Seaman & Lohse (1986c)

127, 129, <u>153</u>, 229, 234, 253

N.B. - SW striae probably trend NE

Salisbury
21 I/3

Hamilton (1962a) - orientations measured from map

072, 072, 072, 072, 072, 074

Rampton & Paradis (1981b) - orientations measured from map

069, 082, 112

Thibault & Brinsmead (1985)

070, 080, 090, 115

Chipman
21 I/4/

Dyer (1926)

090, 090, 163, 190

Hamilton (1960) - orientations measured from map

250, 259

N. B. - this trend is considered questionable

Hamilton (1962b) - orientations measured from map
- both mapped as definite

160, 260

Rampton & Paradis (1981b) - orientations measured from map

163, 177, 181

Thibault (1985c)

055, 090

Salmon River Road
21 I/5

Chalmers (1895)

078, 108, 108, 113, 114, 118, 122, 124, 126, 126, 148

Hamilton (1960) - orientation measured from map

049

Rampton & Paradis (1981b) - orientations measured from map

006, 057, 089, 094, 107, 120, 120, 146

Seaman (1985a)

014, 019, 117

Harcourt
21 I/6

Chalmers (1885, 1895)

001, 001, 002, 003, 003, 003, 003, 004, 004, 004, 005, 005,
005, 006, 006, 007, 007, 008, 009, 009, 009, 009, 011, 011,
011, 012, 012, 013, 013, 014, 016, 017, 017, 019, 019, 019,
024, 027, 029, 029, 031, 032, 034, 039, 042, 049, 084, 109,
327, 338, 339, 344, 344, 352, 354, 354, 357, 358, 359, 359,
359

Rampton & Paradis (1981b) - orientations measured from map

021, 052

Seaman (1985b)

005

Buctouche
21 I/7

Chalmers (1895)

018, 019, 029, 038, 038, 038, 039, 039, 039, 043, 044, 044, 049, 049, 049, 050, 052, 054, 054, 059, 059, 059, 063, 099, 099, 149, 168, 169, 174, 179, 189

Rampton & Paradis (1981b) - orientations measured from map

042, 062, 177

Robb, J. (in Chalmers 1885)

025, 068

Thibault (1985d)

000, 000, 035, 045, 045, 045, 045, 045, 045, 055, 060, 110

Richibucto
21 I/10

nil

Rogersville
21 I/11

Chalmers (1885, 1895)

059, 078, 082, 083, 083, 084, 086, 088, 088, 089, 090, 093, 094, 096, 098, 102, 103, 107

Seaman (1985c)

012, 094, 320

Blackville
21 I/12

Chalmers (1885, 1895)

024, 024, 026, 028, 030, 032, 038, 038, 068, 068, 076, 078, 088, 088, 090, 098, 098, 106, 108, 338, 348

Rampton & Paradis (1981b) - orientations measured from map

009, 022

Seaman (1983)

012, 020, 026, 030, 030, 031, 036, 040, 043, 104, 131, 349

Newcastle
21 I/13

Chalmers (1885, 1888, 1895)

000, 002, 010, 022, 028, 032, 034, 036, 040, 043, 043, 046, 046, 058, 062, 068, 069, 070, 070, 072, 073, 073, 074, 080, 087, 088, 088, 092, 092, 094, 096, 096, 097, 097, 098, 102, 106, 106, 106, 113, 118, 128, 143, 160, 163, 202

Kouchibouguac
21 I/14

Chalmers (1888, 1895)

086, 097

Rampton & Paradis (1981b) - orientations measured from map

020, 063, 090, 151

Seaman (1985d)

057, 075

Pointe-Sapin
21 I/15

nil

Minto
21 J/1

Dyer (1926)

222, 222

Ells (in Mathew 1879)

195

Muller (1950) - orientations measured from map
- all mapped as definite

155, 220, 224, 225

Rampton & Paradis (1981a) - orientations measured from map

156, 182, 183, 193, 224

Seaman (1985e)

197, 205, 205, 223, 231

Seaman (1988 field notes)

160, 220

Burtts Corner
21 J/2

Anderson & Poole (1959) - orientations measured from map
- all mapped as definite

140, 146, 152, 155, 156

Chalmers (1884, 1902)

093, 096, 100, 101, 116, 116, 120, 136, 140, 140, 140, 142,
145, 145, 145, 146, 150, 150, 150, 150, 150, 150, 150, 150,
155, 155, 155, 158, 160, 160, 170, 175, 180, 185, 191, 193,
195, 206, 206, 209, 226, 250

Hind (in Chalmers 1885)

160

Poole (1957) - orientations measured from map
- all mapped as definite

143, 143, 144, 147, 148, 149, 149, 151, 152, 152, 154

Rampton & Paradis (1981a) - orientations measured from map

132, 144, 152, 154, 155, 167

Burtts Corner (21 J/2), con't...

Robb, C. (in Chalmers 1885)

135, 142, 145

Robb, J. (in Chalmers 1885)

147, 150, 162

Seaman (1981)

109, 131, 140, 141, 143, 143, 143, 145, 147, 148, 149, 149, 150, 153, 155, 157, 157, 158, 158, 159, 160, 161, 161, 165, 165, 165, 166, 166, 168, 169, 170, 171, 172, 173, 174, 188

Millville
21 J/3

Anderson (1968) - orientations measured from map
- all mapped as definite

146, 162, 175, 176, 177

Anderson & Poole (1959) - orientations measured from map
- all mapped as definite

149, 175, 176, 181

Caley (1936) - from report

150 (146 measured from map)

Chalmers (1884, 1902)

115, 120, 125, 140, 144, 145, 145, 150, 150, 150, 150, 150, 152, 155, 155, 155, 157, 160, 160, 162, 165, 173, 175, 175, 185, 195

Finamore (1981a)

116, 130, 136, 138, 142, 143, 145, 145, 146, 149, 150, 151, 152, 154, 155, 156, 157, 158, 159, 160, 160, 160, 161, 161, 162, 163, 164, 165, 166, 168, 169, 171, 174, 174, 175, 175, 175, 177, 178, 183, 185, 185

Millville (21 J/3), con't...

Lutes (1980) - orientation measured from map
- mapped as definite

179

Rampton & Paradis (1981a) - orientations measured from map

093, 131, 132, 165, 166, 176

Woodstock
21 J/4

Anderson & Poole (1959) - orientation measured from map
- mapped as definite

179

Caley (1936) - from report

157

Chalmers (1884, 1902)

130, 130, 155, 155, 156, 158, 159, 160, 160, 160, 165, 165, 165, 165, 165, 170, 175, 190, 190, 195, 200

Finamore (1981b)

093, 115, 130, 131, 132, 133, 134, 136, 138, 140, 144, 146, 146, 147, 149, 152, 152, 153, 155, 156, 158, 158, 158, 158, 158, 163, 163, 165, 165, 166, 167, 168, 168, 169, 170, 170, 173, 174, 174, 180, 181, 186, 190

Lee (1962) - orientations measured from map

128, 143, 149, 157, 159, 160, 160, 160, 161, 163, 163, 165, 165, 165, 166, 166, 167, 167, 169, 171, 184, 186, 195, 207

Woodstock (21 J/4), con't...

Rampton & Paradis (1981a) - orientations measured from map 092, 143, 147, 161, 170

Florenceville
21 J/5

Chalmers (1884, 1902)

165, 165, 180, 185, 189, 190, 204, 210

Lee (1962) - orientations measured from map

149, 165, 168, 173, 175, 176, 181, 187, 192, 194, 201, 210

Rampton & Paradis (1981a) - orientations measured from map

162, 163, 164, 180

Coldstream
21 J/6

Anderson (1968) - orientations measured from map
- both mapped as definite

174, 181

Anderson & Poole (1959) - orientations measured from map
- both mapped as definite

182, 183

Rampton & Paradis (1981a) - orientations measured from map

164, 178, 180, 189, 202

Napadogan
21 J/7

Anderson & Poole (1959) - orientations measured from map
- all mapped as definite

094, 095, 097, 106, 138, 145, 152

Chalmers (1902)

100, 170

Poole (1958) - orientations measured from map

135, 153, 153

Rampton & Paradis (1981a) - orientation measured from map

181

Boiestown
21 J/8

Chalmers (1895, 1902)

018, 028, 040, 050, 068, 160

Seaman (1985f)

027

Doaktown
21 J/9

Chalmers (1895)

013, 016, 018, 020, 023, 023, 023, 028, 028, 033, 070, 318, 318, 354

Poole (1960) - orientations measured from map
- both mapped as definite

076, 076

Rampton & Paradis (1981a) - orientations measured from map

036, 071, 078

Hayesville
21 J/10

Chalmers (1885, 1895, 1902)

025, 028, 030, 033, 035, 038, 038, 046, 090

Poole (1960) - orientations measured from map
- all mapped as definite

031, 056, 058, 064, 072, 073, 091

Poole (1963) - orientations measured from map
- all mapped as definite

057, 063, 064, 073, 083, 085, 085, 092, 093, 094, 097, 100, 101, 104, 104

Rampton & Paradis (1981a) - orientations measured from map

059, 064, 131

Juniper
21 J/11

Chalmers (1902)

125, 152, 153, 185

Andover
21 J/12

Chalmers (1902)

180, 180, 237

Lee (1962) - orientations measured from map

121, 165, 173, 179, 182, 182, 192

Rampton & Paradis (1981a) - orientations measured from map

048, 094

Rappol (1988) - orientations measured from figure

100, 131

Aroostook
21 J/13

Rampton & Paradis (1981a) - orientations measured from map

113, 179

Rappol (1986) - orientation measured from figure

067

Rappol (1988) - orientations measured from figure

073, 078, 106, 117, 172, 209

Thibault, (1980b)

165, 180, 205, 210, 290

Plaster Rock
21 J/14

Rampton & Paradis (1981a) - orientations measured from map
101, 182

Rappol (1986) - orientations measured from figure
099, 104, 118, 133, 181

Rappol (1988) - orientations measured from figure
103, 117, 130, 184

Skinner (1982) - orientations measured from map
116, 151

Tuadook Lake
21 J/15

Pronk (1984) - orientations measured from map

109, 118, 119

Rampton & Paradis (1981a) - orientations measured from map

082, 089, 094, 115

Skinner (1975) - orientations measured from map

081, 089, 091, 093, 098, 100, 102, 113, 116, 119, 119, 121, 135

McKendrick Lake
21 J/16

Anderson (1970a) - orientations measured from map

068, 070, 072, 073, 086, 088, 088, 089, 090, 090, 095, 097, 098, 098, 098, 101, 103, 105, 109, 112, 113, 115, 115, 115, 117, 127, 139, 141

Rampton & Paradis (1981a) - orientations measured from map

052, 060, 061, 066, 067, 076, 099, 104, 105, 105, 109, 110, 144

Shaw (1936) - orientation measured from map
- mapped as definite

126

Connors
21 N/2

Gauthier (1982) - orientations measured from map

288, 303

Rappol (1986) - orientations measured from figure

292, 319

Thibault (1986)

180, 290, 300, 320, 340

Estcourt
21 N/6

Thibault (1986)

180

Lac Baker
21 N/7

Gauthier (1982) - orientations measured from map

275, 290, 296, 300

Rappol (1986) - orientations measured from figure

168, 174, 186, 278, 296, 297, 299, 303, 304, 309, 311, 318, 320, 320, 321, 325, 327

Thibault (1986)

115, 135, 135, 135, 135, 135, 140, 145, 150, 155, 320, 320, 330, 335

Edmundston
21 N/8

Chalmers (1885)

115, 115, 135

Gauthier (1982) - orientations measured from map

135, 173, 183, 279, 291, 292, 293, 294, 295, 297, 298, 298,
300, 302, 303, 303, 304, 304, 305, 306, 307, 307, 308, 309,
310, 310, 310, 311, 312, 313, 313, 313, 313, 314, 317, 318,
318, 320, 321, 321, 321, 321, 329, 351

Lee (1955) - orientations measured from map

104, 105, 105, 109, 111, 112, 112, 113, 114, 117, 118, 118,
119, 119, 119, 120, 120, 120, 121, 122, 124, 125, 125, 125,
128, 129, 129, 132, 132, 134, 134, 137, 140, 150, 152, 153,
164, 164, 166, 167

Rappol (1986) - orientations measured from figure

003, 101, 105, 107, 109, 110, 143, 239, 295, 300, 301, 302,
305, 307, 310, 310, 311, 311, 312, 313, 314, 314, 345, 346,
350, 351, 359

Thibault (1979a)

110, 110, 112, 115, 115, 120, 120, 120, 130, 135, 135, 140,
165

Grandmaison
21 N/9

Gauthier (1982) - orientations measured from map

271, 274, 276

Rappol (1986) - orientations measured from figure

137, 209, 265, 267, 276, 291, 302, 347

Thibault (1979b)

070, 085, 090, 090, 090, 095, 095, 095, 095, 100, 100, 100, 100, 105, 105, 110, 110, 117, 120, 130, 130, 130, 135, 155

Wild Goose Lake
21 N/16

nil

Big Bald Mountain
21 O/1

Anderson (1961) - orientations measured from map

035, 089, 091, 103

Anderson (1970b) - orientations measured from map

036, 090, 092, 102, 134

Gauthier (1982) - orientations measured from map

038, 039, 040, 064, 065, 069, 069, 070, 071, 072, 073, 073, 075, 076, 078, 080, 080, 081, 083, 083, 084, 084, 085, 087, 088, 091, 097, 103, 104, 105, 106, 112, 113, 126, 128, 143, 158

Paradis & Thomas (1986a)

066, 178

Smith (1957) - orientations measured from map
- both mapped as definite

110, 120

Serpentine Lake
21 O/2

Gauthier (1982) - orientations measured from map

027, 085, 085, 086, 088, 089, 089, 089, 089, 091, 091, 098, 102, 102, 104, 104, 108, 116, 118, 119, 121, 129

Pronk (1984) - orientation measured from map

115

Pronk (1988 field notes)

110

Riley Brook
21 O/3

Gauthier (1982) - orientation measured from map

102

Pronk (1988 field notes)

010, 021, 023, 024, 029, 030, 032, 040, 053, 065, 070, 082,
084, 084, 085, 092, 092, 094, 094, 095, 096, 096, 097, 098,
098, 099, 100, 100, 100, 101, 102, 103, 103, 104, 105, 106,
106, 106, 106, 106, 107, 108, 108, 108, 108, 109, 110, 110,
110, 110, 110, 110, 111, 113, 114, 114, 115, 116, 118, 118,
120, 120, 120, 120, 120, 121, 121, 122, 122, 124, 124, 125,
126, 127, 128, 130, 132, 136, 148, 150, 152, 154, 156, 160,
161, 165

Rappol (1986) - orientation measured from figure

117

Grand Falls
21 O/4

Gauthier (1982) - orientations measured from map

100, 120

Lee (1959) - orientation measured from map

141

Rappol (1986) - orientations measured from figure

080, 090, 112, 112, 121, 127, 179, 182, 198, 199, 209, 210, 215, 215, 220, 222, 301, 325, 338

Rappol (1988) - orientations measured from figure

093, 096, 110, 120, 127, 203, 211, 215, 216, 224, 238, 296, 328, 330

Thibault (1980a)

120, 125, 155, 170, 195, 200, 200, 210, 210, 225

Grand River
21 O/5

nil

Sisson Branch Reservoir
21 O/6

Rappol (1986) - orientations measured from figure

074, 126, 155

Thibault (1984b)

000, 020, 030, 075, 080, 115

Nepisiguit Lakes
21 O/7

Constable (1975a,b) - orientations measured from maps

059, 063, 063, 097, 222

N.B. - 222 flow direction is considered questionable

Seaman (1984)

100, 105, 111, 113, 113, 118, 125, 127, 136, 148, 180

California Lake
21 O/8

Gauthier (1982) - orientations measured from map

054, 058, 060, 066, 066, 067, 069, 069, 074, 075, 076, 079,
080, 081, 081, 081, 081, 083, 083, 083, 084, 084, 085, 086,
086, 087, 087, 087, 087, 087, 088, 089, 089, 089, 090, 090,
090, 090, 090, 090, 090, 090, 090, 090, 090, 091, 091, 091,
091, 091, 092, 092, 092, 092, 093, 093, 094, 094, 095, 096,
096, 097, 098, 099, 099, 106, 106, 110, 111, 121, 125

Helmstaedt (1971) - orientation measured from map

071

Paradis & Thomas (1986b)

070, 090

Smith (1957) - orientations measured from map
- all mapped as definite

085, 090, 122

Smith et al. (1973) - orientations measured from map
- all mapped as definite

085, 096, 124

Tetagouche Lakes
21 O/9

Finamore (1979a)

017, 078, 080, 083, 085, 088, 088, 088, 088, 090, 092, 094, 095, 095, 096, 097, 098, 098, 099, 099, 102, 103, 105, 105, 107, 108

Gauthier (1982) - orientations measured from map

076, 079, 080, 083, 083, 085, 085, 087, 088, 089, 089, 089, 094, 094, 095, 101, 103, 107, 139

Helmstaedt (1971) - orientation measured from map

065

Pronk (1986) - orientations measured from map

012, 030, 031, 033, 035, 037, 041, 043, 046, 048, 049, 052, 057, 063, 067, 069, 072, 073, 074, 074, 076, 076, 077, 077, 078, 078, 078, 078, 079, 079, 079, 080, 080, 080, 081, 081, 081 ,081, 081, 082, 082, 082, 082, 082, 082, 082, 082, 082, 083, 083, 083, 083, 084, 084, 084, 084, 084, 084, 085, 085, 085, 086, 086, 086, 086, 086, 086, 086, 087, 087, 087, 087, 087, 087, 087, 088, 088, 088, 088, 088, 088, 088, 088, 088, 089, 089, 089, 089, 089, 089, 089, 089, 089, 090, 090, 090, 090, 090, 090, 090, 090, 090, 090, 090, 090, 090, 090, 090, 090, 091, 091, 091, 091, 091, 091, 091, 092, 092, 092, 092, 092, 092, 092, 092, 092, 092, 092, 092, 092, 092, 092, 092, 093, 093, 093, 093, 093, 093,

Tetagouche Lakes (21 O/9), con't...

093, 093, 093, 093, 093, 094, 094, 094, 094, 094, 094, 095, 095, 095, 096, 096, 096, 096, 096, 096, 096, 097, 097, 097, 097, 097, 097, 098, 099, 099, 100, 100, 100, 100, 101, 101, 101, 102, 103, 103, 103, 103 ,105, 105, 105, 106, 107, 107, 108, 108, 109, 111, 111, 112, 114, 114, 115, 134, 140, 146, 349, 355

Skinner (1956) - orientations measured from map
- all mapped as definite

089, 093, 095

Skinner (1974) - orientations measured from map

088, 090, 093, 094, 096, 101, 101, 102, 106

Smith (1957) - orientations measured from map
- all mapped as definite

091, 093, 095

Upsalquitch Forks
21 O/10

Brinsmead (1979a)

077, 080, 080, 088

Gauthier (1982) - orientations measured from map

071, 072, 073, 080, 081, 082, 083, 089, 092, 098

Helmstaedt (1971) - orientations measured from map

079, 082, 091

Potter (1965) - orientations measured from map

076, 077, 091

Pronk (1987) - orientations measured from map

000, 001, 002, 007, 037, 039, 043, 045, 049, 052, 053, 058,
059, 059, 059, 059, 061, 061, 063, 065, 065, 067, 072, 072,
072, 073, 074, 075, 076, 076, 077, 077, 079, 080, 080, 080,
080, 081, 081, 081, 083, 084, 084, 084, 086, 086, 086, 087,
087, 087, 087, 087, 087, 088, 088, 088, 088, 088, 088, 088,
089, 089, 089, 089, 090, 090, 090, 090, 090, 091, 091, 092,
092, 092, 092, 093, 094, 095, 096, 097, 100, 101, 103, 104,
110, 111, 328, 351, 352, 354

Kedgwick
21 O/11

Gartner Lee Associates Ltd. (1986)

220

Gounamitz River
21 O/12

Gauthier (1982) - orientations measured from map

085, 092, 093, 099, 102, 103, 103, 106, 107, 107, 115, 117, 121, 131, 341

Rappol (1986) - orientations measured from figure

113, 114, 116, 179, 270, 271, 272, 320

States Brook
21 O/13

Chalmers (1887)

142

Gauthier (1982) - orientations measured from map

065, 092, 092, 095, 103, 103, 112, 114, 122, 122, 147

Menneval
21 O/14

Gauthier (1982) - orientation measured from map

063

Atholville
21 O/15

Alcock (1935) - orientations measured from figure
- both mapped as definite

069, 074

Alcock (1941b) - orientation measured from map
- mapped as definite

075

Chalmers (1885)

067, 067, 067, 067, 077, 077, 077, 112

Finamore (1979b)

048, 060, 063, 065, 065, 068, 068, 070, 071, 077, 080, 080, 086

Gauthier (1982) - orientations measured from map

056, 061, 061, 062, 063, 065, 071, 076

Greiner (1974c) - orientations measured from map

010, 050, 052, 054, 061, 075, 085

Atholville (21 O/15), con't...

Pronk (1988a) - orientations measured from map

011, 030, 032, 038, 042, 045, 046, 049, 051, 052, 052, 053,
055, 055, 055, 057, 058, 058, 059, 059, 059, 060, 060, 060,
061, 062, 062, 062, 062, 063, 064, 065, 065, 065, 066, 066,
067, 067, 068, 069, 070, 070, 070, 071, 071, 071, 072, 072,
072, 073, 073, 074, 074, 074, 076, 078, 079, 079, 083, 085,
086, 088, 091, 093, 103, 343

Charlo
21 O/16

Alcock (1935) - orientations measured from figure
- all mapped as definite

022, 028, 041, 083

Alcock (1941a) - orientations measured from map
- all mapped as definite

025, 026, 043, 047

Bobrowsky (unpublished map) - orientations measured from map

007, 012, 018, 022, 023, 025, 027, 027, 030, 033, 041, 046, 046, 047, 048, 048, 048, 051, 052, 053, 056, 058, 061, 073, 076, 081, 082, 082, 082, 083, 086, 086, 087, 088, 136, 140, 141, 143, 172

Brinsmead (1979b)

050, 050-055, 052, 055, 065, 075-080, 080, 080, 080, 080, 090

Chalmers (1885, 1887)

012, 021, 076, 082, 082, 082, 097, 097

Gauthier (1982) - orientations measured from map

034, 050, 056, 062, 063, 067, 072, 078, 082, 085, 089, 090

Charlo (21 O/16), con't...

Greiner (1970) - orientations measured from map

008, 017, 017, 018, 019, 019, 020, 020, 022, 022, 023, 023, 024, 029, 030, 030, 033, 039, 040, 041, 045, 050, 056, 058, 058, 059, 064, 066, 068, 069, 069, 070, 079, 079, 103, 121, 132, 141, 340, 356

Pronk (unpublished map) - orientations measured from map

044, 085, 087, 087, 091, 151, 171

Point Escuminac
21 P/2

nil

Chatham
21 P/3

Gauthier (1982) - orientations measured from map

068, 079, 082, 112

Thibault (1985e)

135

Sevogle
21 P/4

Brinsmead (1978)

000, 020, 025, 025, 025, 030, 030, 030, 035, 040, 050, 070, 310, 327, 325-335, 355

Chalmers (1885)

093, 198, 203

Dawson (1961) - orientations measured from map

194, 197, 201, 208, 211, 212, 213, 213, 223, 224 225, 225

N.B. - trend appears to be reversed

Gauthier (1982) - orientations measured from map

016, 019, 020, 023, 025, 025, 027, 027, 030, 032, 034, 040, 051, 062, 065, 066, 069, 080, 332, 355, 356

Smith (1957) - orientations measured from map

035, 061

Nepisiguit Falls
21 P/5

Alcock (1935) - orientation measured from figure
- mapped as definite

044

Gauthier (1982) - orientations measured from map

016, 017, 021, 024, 024, 024, 025, 025, 026, 027, 029, 029,
030, 030, 030, 031, 032, 033, 033, 034, 034, 035, 037, 040,
047, 054, 056, 058, 058, 059, 060, 061, 062, 065, 069, 070,
071, 071, 072, 072, 072, 073, 073, 073, 074, 074, 075, 075,
075, 076, 076, 079, 080, 082, 083, 084, 084, 086, 087, 087,
087, 089, 089, 091, 092, 095, 109, 112, 137, 147, 297, 342

Skinner (1974) - orientations measured from map

018, 021, 070, 085, 108

Skinner & McAlary (1952) - orientations measured from map
- all mapped as definite

021, 023, 031, 085, 107

Smith (1957) - orientation measured from map
- mapped as definite

066

Nepisiguit Falls (21 P/5), con't...

Thibault (1978) - orientations measured from map

013, 015, 017, 019, 020, 021, 021, 022, 026, 029, 050, 054, 061, 064, 067, 067, 067, 070, 071, 071, 073, 075, 075, 076, 078, 078, 079, 079, 080, 080, 082, 084, 085, 085, 087, 088, 092, 092, 092, 092, 093, 093, 095, 100, 101, 117, 143, 154, 291

Tabusintac River
21 P/6

Gauthier (1982) - orientations measured from map

017, 035, 087, 096, 312, 319, 321, 328

Wishart Point
21 P/7

nil

Tracadie
21 P/10

nil

Burnsville
21 P/11

nil

Bathurst
21 P/12

Alcock (1935) - orientation measured from figure
- mapped as definite

050

Alcock (1941a) - orientations measured from map
- all mapped as definite

041, 041, 044, 070

Chalmers (1885, 1887, 1888)

022, 022, 022, 040, 042, 042, 046, 046, 046, 056, 057, 067, 072, 072, 072, 077, 077, 086

Davies et al. (1969) - orientations measured from maps

073, 080, 083, 087, 091, 091, 103

Finamore (1978)

012, 035, 035, 037, 070, 072, 074, 076, 079, 082, 083, 085, 090, 093

Bathurst (21 P/12), con't...

Gauthier (1982) - orientations measured from map

002, 029, 033, 035, 040, 044, 046, 053, 054, 061, 064, 066,
066, 066, 067, 067, 072, 076, 077, 078, 078, 078, 082, 082,
083, 084, 087, 089, 090, 090, 091, 091, 091, 092, 092, 093,
094, 094, 094, 094, 094, 094, 095, 095, 096, 096, 097, 098,
123, 128, 160, 168, 259, 265, 266

Skinner (1953) - orientations measured from map
- all mapped as definite

020, 029, 040, 052, 056, 069, 072, 073, 086, 087, 087, 087,
091, 094, 094, 096, 099, 100

Skinner (1974) - orientations measured from map
- all mapped as definite

020, 027, 039, 040, 054, 055, 066, 069, 073, 085, 085, 087,
088, 090, 094, 094, 096, 099, 101

Smith (1957) - orientations measured from map
- all mapped as definite

034, 048, 055, 069, 076, 079, 091

Young (1911) - orientation measured from map
- mapped as definite

041

Pointe Verte
21 P/13

Alcock (1935) - orientations measured from figure
- all mapped as definite

045, 057, 096, 096, 107, 146, 149

Alcock (1941a) - orientations measured from map
- all mapped as definite

049, 052, 071, 096

Bobrowsky (unpublished map) - orientations measured from map

032, 038, 038, 039, 039, 041, 042, 042, 042, 042, 043, 043,
043, 043, 043, 043, 043, 044, 045, 046, 048, 049, 054, 063,
069, 072, 073, 075, 076, 076, 076, 077, 077, 077, 077, 078,
078, 078, 079, 079, 079, 082, 082, 083, 083, 083, 084, 084,
084, 085, 086, 108, 129, 133, 147, 147, 148, 164, 176, 177,
178, 178, 182, 183, 188, 189, 190, 196, 198, 258

Chalmers (1885, 1887, 1895)

022, 054, 077, 082, 087, 087, 092, 135, 137, 142, 145, 149,
151, 153, 157, 157, 159, 159, 160, 161, 162, 162, 163, 164,
165, 165, 167, 167, 168, 169, 169, 170, 171, 171, 172, 175,
175, 177, 177, 179, 181, 181, 182, 185, 185, 185, 187, 187,
189, 189, 191, 197, 199, 201, 201, 205, 207, 209, 209, 217,
217, 219, 225, 357, 357, 357

Pointe Verte (21 P/13), con't...

Gauthier (1982) - orientations measured from map

029, 032, 033, 042, 043, 049, 049, 050, 050, 050, 053, 053,
054, 058, 058, 061, 063, 066, 066, 071, 072, 073, 080, 082,
083, 085, 086, 087, 088, 089, 090, 091, 092, 093, 093, 093,
094, 098, 098, 098, 099, 114, 186, 229, 283

Greiner (1960) - orientations measured from map

034, 035, 041, 042, 052, 058, 061, 061, 062, 067, 070, 071,
071, 074, 075, 078, 079, 085, 085, 099, 104, 105, 120, 122,
130, 137, 145, 149, 154, 156, 186, 191

Pronk (unpublished map) - orientations measured from map

090, 119, 144, 147, 148, 150, 224

Young (1911) - orientations measured from map
- all mapped as definite

044, 072, 096, 098, 107, 115, 142, 142, 150

Grand-Anse
21 P/14

Gauthier (1982) - orientation measured from map

074

Caraquet
21 P/15

nil

Escuminac
22 B/1

Alcock (1935) - orientation measured from figure
- mapped as definite

069

Chalmers (1885)

067, 072

Finamore (1979c)

073, 090

Greiner (1974a) - orientations measured from map

083, 085, 090, 097

Pronk (1988b) - orientations measured from map

060, 066, 086, 091, 094, 173

Oak Bay
22 B/2

Greiner (1974b) - orientations measured from map

085, 087, 103